

CURRICULUM VITAE

MARGARET E. WIERMAN, M.D.

Home Address:

[REDACTED]

Business Address:

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1055 Clermont Street
Denver, CO 80220

Date of Birth:

[REDACTED]

Place of Birth:

[REDACTED]

Education:

1975	B.A. - Bryn Mawr College, Bryn Mawr, PA
1979	M.D. - Baylor College of Medicine, Houston, TX

Postdoctoral Training:

Internship and Residencies:

1979-1982	Resident in Internal Medicine, Baylor College of Medicine
1982	Chief Medical Resident, Houston Veterans Administration Medical Center, Baylor College of Medicine

Fellowships:

1983-1987	Research Fellow in Medicine, Harvard Medical School
1983-1987	Clinical Fellow in Medicine, Massachusetts General Hospital
1983-1987	Clinical and Research Fellow in Reproductive Endocrinology, Massachusetts General Hospital
1983-1987	Clinical and Research Fellow in Gynecology, Massachusetts General Hospital
1985-1987	Research Fellow in Medicine, Brigham and Women's Hospital

Academic Appointments:

1982	Instructor in Internal Medicine, Baylor College of Medicine
1983-1987	Research Fellow in Medicine, Harvard Medical School
1983-1987	Associate Staff in Medicine, Massachusetts Eye and Ear Infirmary
1987	Instructor in Medicine, Harvard Medical School
1987-1993	Assistant Professor in Medicine, University of Colorado School of Medicine
1993-	Associate Professor in Medicine, University of Colorado School of Medicine
1997-	Chief, Section of Endocrinology, Denver Veterans Affairs Medical Center
1998-	Associate Professor in Physiology and Biophysics, University of Colorado School of Medicine
1998-	Member, Biomedical Sciences Graduate Program, University of Colorado School of Medicine
2001-	Professor in Medicine, Physiology and Biophysics, University of Colorado School of Medicine

Licensure and Certification:

1979-1994	Texas State Board of Medical Examiners
1983-1988	Massachusetts Board of Medical Examiners
1982	American Board of Internal Medicine
1985	Subspecialty - Endocrinology and Metabolism
1987-	Colorado Board of Medical Examiners

Honors:

1979	Baylor Medical Alumni Outstanding Student Award
1988-1992	Research Associate Award, Veterans Affairs
1995-1999	Clinical Investigator Award, Veterans Affairs
1997	American Society of Clinical Investigation

Associations and Societies:

1986-	The Endocrine Society
1986-	American Federation of Clinical Research
1987-	Women in Endocrinology
1993-	Western Society for Clinical Investigation
1995-	Society for Neuroscience
1995-	American Neuroendocrine Society
1997-	American Society of Clinical Investigation

Teaching Experience:

1976	Teaching Assistant, Anatomy and Cell Biology, Baylor College of Medicine
1982	Teaching Responsibilities as Chief, Medical Resident: Morning report, Medical Service conferences, Rounding with General Medicine Teams, Student conferences
1983	Pelvic Examination Instructor, Harvard Medical School
1984-1987	Lecturer, Reproductive Endocrinology Post-graduate course, Harvard Medical School
1987-	Lecturer, Endocrine Pathophysiology Course, University of Colorado Medical School
1988-1993	Lecturer, Patient Problems at the Root of Science for first year medical students
1988-	Resident Housestaff Conferences "Amenorrhea, Hypothalamic-Pituitary Disorders"

1988-	Clinical Laboratory Course for 4th year medical students lecture on evaluation of male and female reproductive axis
1990, 2000	UCHSC Internal Medicine Review Course
1991-1995	Coordinator of Endocrine Pathophysiology, University of Colorado Medical School
1991-1993	Cancer Center Sponsored Community Lectures on "Hormone Replacement in the Menopause"
1992-1993	Lecturer on Endocrine system at the Mini-Medical School at UCHSC
1993-	Clinical correlation on "The Menopause" in Physiology for first year medical students
1997-	Molecular and Cellular Physiology: Molecular Endocrinology "New Insights Into the Physiology of the Reproductive Axis"
1999-	Gonadal Physiology lecture to first year endocrine fellows, UCHSC

Principal Clinical and Hospital Service Responsibilities:

1983-1987	Reproductive Endocrinology Clinic, Massachusetts General Hospital
1983-1987	Staff in Medicine, Massachusetts Eye and Ear Infirmary
1987-	Staff Physician, Veterans Affairs Medical Center, Denver, CO
1987-	Staff Attending - Endocrine Service, University Hospital, Denver, CO

Committees:

1989-1993	Scientific Protocol Review Committee, VAMC
1990-1993	Chairman, Molecular Core Committee, VAMC
1990-1993	Biohazards and Biosafety Committee, VAMC
1991-1993	Chairman, Biohazards and Biosafety Committee, VAMC
1990-1993	Research & Development Committee, VAMC
1990-	Women in Academic Medicine, UCHSC
1990-	Cancer Center Member
1991-	Clinical Research Center Scientific Advisory Committee, UCHSC
1994-1997	Women in Endocrinology Nominating Committee
1995-2002	Faculty Senate, UCHSC
1995-1998	Organizing Committee for the American Neuroendocrine Society
1996-1997	Women in Endocrinology, Chair Nominating Committee
1996-1999	The Endocrine Society Annual Meeting Steering Committee
1996-2000	WSCI Council
1997-2000	WSCI Secretary/Treasurer
1997-	Student Awards & Research Committee, UCHSC
1998-1999	Chair, Annual Meeting Steering Committee of the Endocrine Society
1998-2001	Meetings and Educational Programs Committee, The Endocrine Society
1999-2002	Chair, Meetings and Educational Programs Committee, The Endocrine Society
1999-2000	President Elect, Women in Endocrinology
2000-	Clinical Affairs Committee of Faculty Senate, UCHSC
2000-2002	President, Women in Endocrinology
2000-2001	President-elect, Western Society of Clinical Investigation
2001-2002	President, Western Society of Clinical Investigation
2002-2005	Councilor, The Endocrine Society

Reviewer:

1989-	Ad hoc reviewer for Merit Review and Career Development applications for the Veterans Affairs
1990-	Ad hoc reviewer for Endocrinology, Molecular Endocrinology, Biology of Reproduction
1991-	Ad hoc reviewer for National Science Foundation applications
1994-1997	Editorial Board, Journal of Clinical Endocrinology and Metabolism
1995	Site Review Member for Center in Reproductive Medicine
1997-	Reviewer, JAMA WEB
1998-	U54 Centers for Reproductive Research, NICHD Site Review Committee Member
1998-2002	Population Research Subcommittee, NICHD Study Section
1999-	Editorial Board, Neuroendocrinology
2000-2002	Chairperson, Population Research Subcommittee, NICHD Study Section
2001-	Veterans Affairs Career Development Review Panel
2003-	Reproductive Endocrinology (REN) Study Section, NIH
2003	VA Blue Ribbon Committee on Review of Medical Research

Graduate Thesis Committee:

1999	_____ Molecular Biology Program, UCHSC
2002	_____ , Medical Genetics, UCHSC
2003	_____ Molecular Biology, UCHSC

Invited Lectures:

1990	MGH Basic Science Research Series
1991	Serono Symposia on GnRH and its Analogues
1991	Visiting Lecturer, Department of Neurobiology and Physiology, Northwestern University
1992	The Endocrine Society Postgraduate Assembly
1992	Visiting Lecturer, Tufts University Center for Reproductive Research
1992	Reproductive Endocrine Unit, MGH Seminar Series
1994	Colorado Diabetes/Endocrine Institute, Snowmass, Colorado
1994	International Symposium on Puberty, National Academy of Medicine, Buenos Aires, Argentina
1994	Fourth International Conference on The Control Of The Onset Of Puberty, Pittsburgh, Pennsylvania
1995	Society for the Study of Reproduction, Plenary Lecturer "Control of GnRH Gene Expression"
1995	American College of Rheumatology, Plenary Lecturer, Womens Health "Estrogens and SLE"
1997	Reproductive Endocrine Unit, MGH, Basic Science Seminar Series
1998	Controversies in Colorado Women's Health: "Risks and Benefits of HRT", A Working Symposium, Colorado Women's Health Campaign
1998	Coordinator of Symposia on "Frontiers in the Science of Estrogen Action", April 1998, Denver, CO
1998	17 th Annual Day of Caring "Hormone Replacement Therapy vs. SERMs in Breast Cancer Survivors", May 1998
1998	Visiting Professor, Medical College of Georgia, Department of Physiology "Novel Factors Controlling GnRH Expression and Neuronal Migration"
1998	American Society of Bone and Mineral Research, San Francisco, "SERMs and the Aging Cell"

1999	Clinical Diabetes and Endocrinology in 1999, Snowmass, CO “SERMs: New Tissue Specific Estrogen Analogs” and “New Insights into Erectile Dysfunction and Hypogonadism”
1999	Molecular, Cellular and Developmental Biology, UC Boulder Seminar Series “Novel Factors Controlling GnRH Neuronal Development: Role of Ark”
1999	Reproductive Seminar Series, University of Virginia, Regulation of GnRH expression
1999	5 th International Congress on the Control of Puberty, Liege, Belgium, Developmental control of GnRH gene expression: Role of POU proteins
1999	Visiting Professor, Wayne State University, Division of Endocrinology, Developmental Control of GnRH by POU proteins
1999	Geriatrics Grand Rounds, UCHSC, Glucocorticoid induced osteoporosis
2000	Invited Participant, Sex and Gene Expression, Institute on Women’s Health, West Virginia
2000	Experimental Biology 2000, FASEB, Symposia on the Cell Biology of the GnRH Neuron
2000	Visiting Professor, Reproductive Biology, UCSD, Role of Adhesion related kinase in GnRH neuronal migration and survival
2000	The Endocrine Society, Toronto, CA, Invited Symposium, Factors that Control GnRH
2000	Neuroendocrinology 2000, Satellite Symposia of ICE, Australia, Developmental Control of GnRH
2000	International Congress in Endocrinology, Sydney Australia, Novel Factors that Control GnRH Neuronal Migration and Gene Expression
2001	Western Society for Clinical Investigation, State of the Art speaker in Endocrinology
2001	Leonard Lectureship, University of Washington School of Medicine, “SERMs: Basic Insights and Clinical Applications”
2001	Comparative Endocrinology, Annual Veterinary Medical Conference, Adrenal physiology
2002	The University of Texas, San Antonio, Endocrine Grand Rounds, “Androgens in Women: too much, too little, just right”
2002	University of Utah, Department of Obstetrics and Gynecology Grand Rounds, “SERMs: Basic Insights and Clinical Applications”
2002	Clinical Endocrine Update, Portland Oregon:: Natural and Unnatural Estrogens, Case Studies in PCOS
2003	Clinical Endocrinology and Diabetes Snowmass Meeting, Snowmass CO: Natural and Unnatural Estrogens, Update on PCOS

Trainees (postdoctoral):

1990-1995	Postdoctoral fellow
1990-1995	Postdoctoral fellow
1992-1994	Assistant Professor, Obstetrics and Gynecology
1995-1996	Visiting Scientist from China
1996-1998	Postdoctoral fellow
1998-1999	Postdoctoral fellow
1998-2002	Postdoctoral fellow
2000-2001	Postdoctoral fellow
2000-2001	Visiting Scientist from China
2000-	Instructor in Medicine, UCHSC
2001-	Postdoctoral fellow

Trainees (students):

Current position

1991		Researcher, marine biology
1992		John Hopkins medical school
1992		
1993		University of Colorado Medical School
1994		
1994		
1995		University of Colorado Medical School
1995		Industry
1996		Medical school
1997		
1998		medical student UCHSC
1998		MD-PhD student University of Colorado
1999		Resident in ObGyn
2000		University of Colorado undergraduate
2001		Undergraduate at DU
2001		University of Colorado School of Medicine
2002		UCHSC Cancer Center student fellow
2002		UCHSC Cancer Center student fellow

Current funding support:

1. NIH RO1 NIDDK: Developmental Control of GnRH by POU Domain Proteins, 4/98-5/03, direct costs 2002, _____, no cost extension 03-04
2. NIH RO1 NICHD: Novel Factors that Regulate GnRH Neuronal Development, 3/03-08, direct costs 03 _____
3. VA Merit Review: Repression of GnRH by Liganded Steroid Receptors, 10/01-9/06 direct costs, _____

Publications:

1. **Wierman ME**, Beardsworth DE, Mansfield MJ, Badger TM, Crawford JD, Crigler JF, Bode HH, Loughlin JS, Kushner DC, Scully RE, Hoffman WH, Crowley WF: Puberty without gonadotropins: A unique mechanism of sexual development. New England Journal of Medicine 1985; 312:65-72.
2. Scheurich JW, **Wierman ME**, Brown BG, Ferro PS, Graham DY: Preparation for barium enema: comparison of a commercial formula diet and low-residue, clear-liquid diets in patients. South Med J 1985 75:838-840.
3. **Wierman ME**, Beardsworth DE, Crawford JD, Crigler JF, Mansfield MJ, Bode HH, Boepple PA, Kushner DC, Crowley WF: Adrenarche and skeletal maturation during luteinizing hormone release hormone analogue suppression of gonadarche. Journal of Clinical Investigation 1986; 77:121-126.
4. Santoro N, **Wierman ME**, Filicori M, Waldstreicher J, Crowley WF: Intravenous administration of pulsatile gonadotropin-releasing hormone (GnRH) in hypothalamic amenorrhea: Effects of dosage. Journal of Clinical Endocrinology & Metabolism 1986; 62:109-116.
5. Boepple PA, Mansfield MJ, **Wierman ME**, Rudlin CR, Bode HH, Crigler JR Jr, Crawford JD, Crowley WF Jr Use of a potent, long acting agonist of gonadotropin-releasing hormone in the treatment of

precocious puberty. *Endocrine Reviews* 1986; 7:24-33.

6. Hall DA, Crowley WF, **Wierman ME**, Simeone JF, McCarty KA Sonographic monitoring of LHRH analogue therapy in idiopathic precocious puberty in young girls. *J Clin Ultrasound* 1986 14: 331-338.
7. Gharib SD, **Wierman ME**, Badger TM, Chin WW: Sex-steroid hormone regulation of follicle-stimulating hormone (FSH) subunit messenger ribonucleic acid (mRNA) levels in the rat. *Journal of Clinical Investigation* 1987; 80:294-299.
8. Childs GV, Lloyd JM, Unabia G, Gharib SD, **Wierman ME**, Chin WW: Detection of LH β mRNA levels in individual gonadotropes after castration: Use of a new *in situ* hybridization method with a photobiotinylated cRNA probe. *Molecular Endocrinology* 1987; 1:926-932.
9. **Wierman ME**, Gharib SD, LaRovere JM, Badger TM, Chin WW: Selective failure of androgens to regulate follicle-stimulating hormone β messenger ribonucleic acid levels in the male rat. *Molecular Endocrinology* 1988; 2:492-498.
10. **Wierman ME**, Gharib SD, Chin WW: The structure and regulation of the pituitary gonadotrophin subunit genes. *Baillieres Clin Endocrinol Metab* 1988 2: 869-889.
11. Gharib SD, Roy A, **Wierman ME**, Chin WW: The beta subunit of rat follicle stimulating hormone gene: analysis of structure and nucleotide sequence. *DNA* 1989; 8:339-349.
12. **Wierman ME**, Rivier JE, Wang C: Gonadotropin-releasing hormone-dependent regulation of gonadotropin subunit messenger ribonucleic acid levels in the rat. *Endocrinology* 1989; 124:272-278.
13. Samuels MH, **Wierman ME**, Wang C, Ridgway EC: The effect of altered thyroid status on pituitary hormone messenger ribonucleic acid concentrations in the rat. *Endocrinology* 1989; 124:2277-2282.
14. Gharib SD, **Wierman ME**, Shpnik MA, Chin WW. Molecular biology of the pituitary gonadotropins. *Endocrine Reviews* 1990 11:177-199.
15. **Wierman ME**, Wang C: Androgen selectively stimulates follicle-stimulating hormone β -mRNA levels after gonadotropin-releasing hormone antagonist administration.: *Biol Reprod* 1990 42:563-571.
16. Childs GV, Unabia G, **Wierman ME**, Gharib SD, Chin WW: Castration induces time-dependent changes in the FSH β -mRNA-containing gonadotrope cell population. *Endocrinology* 1990; 126:2205-2213.
17. **Wierman ME**, Gharib SD, Wang C, LaRovere JM, Badger TM, Chin WW: Divergent regulation of gonadotropin subunit mRNA levels by androgens in the female rat. *Biology of Reproduction* 1990; 43:191-195.
18. Martin K, Santoro N, Hall J, Filicori M, **Wierman ME**, Crowley WF Jr: Management of ovulatory disorders with pulsatile gonadotropin-releasing hormone. *Journal of Clinical Endocrinology & Metabolism* 1990; 71:1081A-1081G.

19. Schlaff WD, **Wierman ME**: Endocrinology of male fertility and infertility. *Curr Opin Obstet Gynecol* 1990 2:412-417.
20. Kepa JK, Wang C, Neeley CI, Raynolds MV, Gordon DF, Wood WM, **Wierman ME**: Structure of the rat gonadotropin releasing hormone (rGnRH) gene promoter and functional analysis in hypothalamic cells. *Nucleic Acids Research* 1992; 20:1393-1399.
21. **Wierman ME**, Kepa JK, Sun W, Gordon DF, Wood WM: Estrogen negatively regulates rat gonadotropin releasing hormone (rGnRH) promoter activity in transfected placental cells. *Molecular and Cellular Endocrinology* 1992; 86:1-10.
22. Boepple PA, Frisch LS, **Wierman ME**, Hoffman WH, Crowley WF Jr: The natural history of autonomous gonadal function, adrenarche and central puberty in gonadotropin-independent precocious puberty. *Journal of Clinical Endocrinology & Metabolism* 1992; 75:1550-1555.
23. Bruder JM, Krebs WD, Nett TM, **Wierman ME**: Phorbol ester activation of the protein kinase C pathway inhibits gonadotropin-releasing hormone gene expression. *Endocrinology* 1992; 131:2552-2558.
24. Cryns VL, Thor A, Xu H-J, Hu S-X, **Wierman ME**, Vickery AL Jr, Benedict WF, Arnold A: Loss of the retinoblastoma tumor-suppressor gene in parathyroid carcinoma. *New England Journal of Medicine* 1994; 330:757-761.
25. Bruder JM, **Wierman ME**: Evidence for transcriptional inhibition of GnRH gene expression by phorbol ester at a proximal promoter region. *Molecular and Cellular Endocrinology* 1994; 99:177-182.
26. Kepa JK, Neeley CI, Jacobsen BM, Bruder JM, McDonnell DP, Leslie KK, **Wierman ME**: Estrogen receptor mediated regulation of rat gonadotropin releasing hormone (GnRH) promoter activity in hypothalamic cells. *Endocrine* 1994; 2:947-956.
27. Bruder JM, Samuels MH, Bremner WJ, Ridgway EC, **Wierman ME**: Hypothyroidism-induced macroorchidism: Use of a gonadotropin-releasing hormone agonist to understand its mechanism and augment adult stature. *Journal of Clinical Endocrinology and Metabolism* 1995; 80:11-16.
28. **Wierman ME**, Bruder JM, Kepa JK: Regulation of gonadotropin-releasing hormone (GnRH) gene expression in hypothalamic neuronal cells. *Cellular and Molecular Neurobiology* 1995; 15:79-88.
29. Bruder JM, Spaulding AJ, **Wierman ME**: Phorbol ester inhibition of rat gonadotropin-releasing hormone promoter activity: Role of Fos and Jun in the repression of transcription. *Molecular Endocrinology* 1996; 10:35-44.
30. **Wierman ME**, Fang Z, Kepa JK: GnRH gene expression in neuronal cell lines. *Trends in Endocrinology and Metabolism* 1996; 7:60-65.
31. Kepa JK, Jacobsen BM, Boen EA, Prendergast P, Edwards DP, Takimoto G, **Wierman ME**: Direct

binding of progesterone receptor to nonconsensus DNA sequences represses rat GnRH. *Molecular and Cellular Endocrinology* 1996; 117:27-39.

32. Kopa JK, Spaulding AJ, Jacobsen BM, Fang Z, Xiong X, Radovick S, **Wierman ME**: Structure of the distal human gonadotropin releasing hormone (hGnRH) gene promoter and functional analysis in GT1-7 neuronal cells. *Nucleic Acids Research* 1996; 24:3614-3620.
33. **Wierman ME**, Xiong X, Kopa JK, Spaulding AJ, Jacobsen BM, Fang Z, Nilaver G, Ojeda SR: Repression of gonadotropin-releasing hormone promoter activity by the POU homeodomain transcription factor SCIP/Oct-6/Tst-1: A regulatory mechanism of phenotype expression? *Molecular & Cellular Biology* 1997; 17:1652-1665.
34. Fang Z, Xiong X, James A, Gordon DF, **Wierman ME**: Identification of novel factors that regulate GnRH gene expression and neuronal migration. *Endocrinology* 1998; 139:3654-3657.
35. **Wierman ME**: Erectile dysfunction: A multifaceted disorder. *Hospital Practice*. 1998; 33:65-90.
36. **Wierman ME**: Advances in the diagnosis and management of impotence. *Adv Intern Med*. 1999 44: 1-17.
37. Allen M, Zeng C, Schneider K, Xiong X, Meintzer MK, Bellosta P, Basilico C, Varnum B, Heidenreich KA, **Wierman ME**: Growth arrest specific gene 6 (Gas6)/adhesion related kinase (Ark) signaling promotes gonadotropin releasing hormone (GnRH) neuronal survival via Akt and ERK. *Molecular Endocrinology* 1999; 13:191-201.
38. Allen MP, Xu M, Zeng C, Tobet SA, **Wierman ME**: Myocyte enhancer factors-2B and 2C are required for adhesion related kinase (Ark) repression of neuronal Gonadotropin releasing hormone (GnRH) gene expression. *Journal of Biological Chemistry* 2000; 275: 39662-39670.
39. Li M, Allen MP, Meintzer MK, Linseman DA, Wang X, Laessig T, **Wierman ME**, Heidenreich KA: Myocyte enhancer factor 2A and D undergo phosphorylation and caspase-mediated degradation during apoptosis of rat cerebellar granule neurons. *J Neuroscience* 2001; 21: 6544-6452 .
40. Allen MP, Linseman DA, Udo H, Xu M, Schaack JB, Varnum B, Kandel ER, Heidenreich KA and **Wierman ME**. A novel mechanism for GnRH neuron migration involving Gas6/Ark signaling to p38 MAP Kinase. *Molecular and Cellular Biology*, 2002; 22:599-613.
41. Pawlowski JE, Ertel JR, Allen MP, Xu M, Wilson EM and **Wierman ME**. Liganded androgen interaction with B-catenin: nuclear co-localization and modulation of transcriptional activity in neuronal cells. *J Biol Chem* 2002; 277:20702-10.
42. Allen MP, Xu M, Linseman DA, Pawlowski JA, Bokoch GM, Heidenreich KA and **Wierman ME**: Adhesion related kinase (Ark) repression of Gonadotropin releasing hormone (GnRH) expression requires Rac activation of the extracellular signal-regulated kinase (ERK) pathway. 2002 *J Biol Chem*; 277: 38133-40.

43. Vazquez-Marinez R, Leclerc GM, **Wierman ME**, Boockfor FR: Episodic activation of the rat GnRH promoter: role of the homeoprotein OCT 1. 2002 *Mol Endocrinol*, 16:2093-100.
44. Hirshman E, Wells E, **Wierman M**, Anderson B, Butler A, Fisher J: The effect of Dehydroepiandrosterone (DHEA) on recognition memory discrimination and decision processes in post-menopausal women 2003, *Psychonomic Bulletin and Review*, in press.
45. Petroff "BK, Croutch CR, Hunter DM, **Wierman ME**, Gao X. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (TCDD) stimulates gonadotropin secretion in the immature female Sprague dawley rat through a pentobarbital and estradiol-sensitive mechanism but does not alter Gonadotropin Releasing Hormone (GnRH) secretion by immortalized GnRH neurons in vivo. 2003 *Biol Reprod*, in press.
46. Shattuck TM, Kim TS, Costa J, Yandell DW, Imanishi Y, Palanisamy N, Gaz RD, Shoback D, Clark OH, Monchik JM, **Wierman ME**, Hollenberg A, Tojo K, Chaganti RSK, and Arnold A: Mutational Analyses of RB and BRCA2 as Candidate Tumor Suppressor Genes in Parathyroid Carcinoma. 2003 *Clinical Endocrinology*, in press.
47. Allen MP, Linseman DA, Pawlowski JE, Bouchard R, Heidenreich KA, **Wierman ME**: Adhesion related kinase induction of GnRH neuronal migration involves coordination of the PI3K and SRC signaling pathways. in preparation.
48. Pawlowski JE, Xu M, Allen MP, Edwards D, Wilson E and **Wierman ME**: Androgen receptor inhibition of rat GnRH promoter activity in neuronal cells maps to nonconsensus response elements in the proximal promoter and occurs independent of DNA binding (in preparation).
49. Hirshman E, Merritt P, Wang C, Wierman ME, Budescu D, Kohrt W, Templin J, and Bhasin S: Androgens and Estrogens mediate the effects of dehydroepiandrosterone (DHEA) on cognition in post-menopausal women. (in preparation).

Reviews:

1. **Wierman ME**, Crowley WF: Neuroendocrine control of the onset of puberty. IN: *Human Growth: A Comprehensive Treatise*, 2nd Edition (JM Tanner, Editor), Plenum Press, 1985; 225-238.
2. Chin WW, Gharib SD, **Wierman ME**: Hormonal regulation of pituitary gonadotropin gene expression. *International Symposium on contraception research for today and the ninety's*, (Talwar, editor), M/S Springer Verlag, NY 1986.
4. Santoro N, **Wierman ME**, Filicori M, Waldstreicher J, Crowley WF: The physiology of GnRH in the female: Effects of the dose of GnRH upon the pituitary and gonadal responses during induction of ovulation. IN: *Episodic Hormone Secretion*, (TOF Wagner and M Filicori, Editors), TM Verlag, 1987; 207-218.
5. Santoro N, Filicori M, **Wierman ME**, Hall J, Crowley WF: Hypogonadotropic hypogonadism in females. IN: *The Episodic Secretion of Hormones*, (WF Crowley and JG Hofler, Editors), John Wiley & Sons, New York, 1987; 247-256.

6. Childs GV, Lloyd JM, Unabia G, **Wierman ME**, Gharib SD, Chin WW: Differential regulation of LH β and FSH β subunit gene expression: In situ hybridization studies of individual gonadotropes. IN: Neural Control of Reproductive Function, (JM Lakoski, JR Perez-Polo, EK Rassin, Editors), Alan R. Liss, Inc., 1988.
7. **Wierman ME**, Gharib SD, Chin WW: The structure and regulation of the gonadotropin subunit genes. IN: Clinical Endocrinology, (MC Sheppard, Editor), WB Saunders, London 1988; 869-889.
8. **Wierman ME**, Sun W, Wang C, Gordon DF, Wood WM: Control of rat gonadotropin releasing hormone promoter activity in placental cells. IN: Modes of Action of GnRH and GnRH Analogs, (WF Crowley and PM Conn, Editors) 1992; 106-115.
11. Bruder JM, **Wierman ME**: Hyperthyroidism. IN: Decision Making in Reproductive Endocrinology, (WD Schlaff and JA Rock, Editors) 1993; 34:213-217.
12. **Wierman ME**, Bruder JM, Kepa JK, Jacobsen BM: Regulation of gonadotropin releasing hormone (GnRH) gene expression by steroid and peptide hormones. IN: Puberty: Basic and Clinical Aspects, (C Bergada and JA Moguilevsky, Editors), Ares-Serono Symposia Publications, Rome, Italy, 1995; 10:63-73.
13. **Wierman ME**, Bruder JM, Jacobsen BM, Neeley CI, Kepa JK: Transcriptional regulation of the GnRH gene. IN: The Neurobiology of Puberty (TM Plant and PA Lee, Editors), Journal of Endocrinology Limited, Bourne Press, Great Britain, pp. 15-24, 1995.
14. **Wierman ME**: Gonadotropin releasing hormone. IN: Reproductive Endocrinology, Surgery, and Technology, (EY Adashi, JA Rock, and Z Rosenwaks, Editors), Lippincott-Raven Publishers, Philadelphia, PA, pp 665-681, 1996.
15. **Wierman ME**: Amenorrhea. IN: Endocrine Secrets, (MT McDermott, Editor), Hanley & Belfus, Inc., Philadelphia, PA, 1998; 267-271.
17. **Wierman ME**, Allen MP, Zeng C, Xu M, and Dowell C: Developmental Control of GnRH: Role of POU homeodomain proteins. IN: Control of the onset of Puberty, (JP Bourginoun and TP Plant, editors), Elsevier Press, Amsterdam, The Netherlands, 2000.
18. **Wierman ME**: Hypogonadism and Erectile Dysfunction. In: The Handbook of Diagnostic Endocrinology, (JE Hall and L Nieman, editors), Humana Press, Totowa, NJ, 2000.
19. **Wierman ME**: Amenorrhea. In: Endocrine Secrets, 3rd edition, (M McDermott, editor), Hanley and Belfus, Inc, Philadelphia, PA, 2001.
20. **Wierman ME**: Endocrine Disorders and Obesity. In: Obesity: Clinical Evaluation and Treatment (RH Eckel, editor), Lippincott, Williams and Wilkins, Philadelphia, PA, 2002.

Books:

1. **Wierman ME:** editor Diseases of the Pituitary: Diagnosis and Treatment, Humana Press, 1997.

Abstracts:

1. **Wierman ME**, Beardsworth DE, Crawford JD, Crigler JF, Bode HH, Kushner DC, Crowley WF: Adrenarche and growth during LHRH agonist administration. *Pediatric Research* 1984; 502:179A.
2. Beardsworth DE, **Wierman ME**, Mansfield MJ, Crawford JD, Crigler JF, Bode HH, Kushner DC, Crowley WF: Use of an LHRH agonist in the treatment of males with central precocious puberty. *Pediatric Research* 1984; 18:#409;169A.
3. **Wierman ME**, Beardsworth DE, Crawford JD, Crigler JF, Bode HH, Scully RE, Hoffman WH, Crowley WF: Gonadarche without gonadotropins: A new mechanism of sexual maturation. *Clinical Res* 1984; 32(2):276A.
4. **Wierman ME**, Beardsworth DE, Mansfield MJ, Kushner DC, Crawford JD, Crigler JF, Bode HH, Crowley WF: Use of an LHRH analogue in the treatment of central precocious puberty. 7th International Congress of Endocrinology 1984; 1611.
5. Santoro N, **Wierman ME**, Filicori M, Crowley WF: The spectrum of abnormal patterns of gonadotropin-releasing hormone secretion in hypothalamic amenorrhea. Eastern Section, AFCR Clin Research 1984.
6. Santoro N, **Wierman ME**, Filicori M, Crowley WF: Intravenous administration of pulsatile gonadotropin-releasing hormone in hypothalamic amenorrhea: Effects of dosage. Eastern Section, AFCR Clin Research 1984; 32:690A.
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